

## ABSTRACT OF THE DISCLOSURE

A plant growth regulator and a method for preparation thereof are provided; the plant growth regulaor comprises  
5 cinnamic acid as an active component, wherein cinnamic acid is dissolved or dispersed in an aqueous medium in high concentrations. The regulator prevents useless growth of young plants such as seedlings or nursery plants, and useless growth of potted plants (Bonsai); namely it is effective for dwarfing a plant; it can  
10 improve the quality of gardening plants and horticultural or agricultural yields. Since cinnamic acid is a naturally occurring substance, the plant growth regulator comprising the acid has high concern for environment and no problems in safety and health of human bodies.